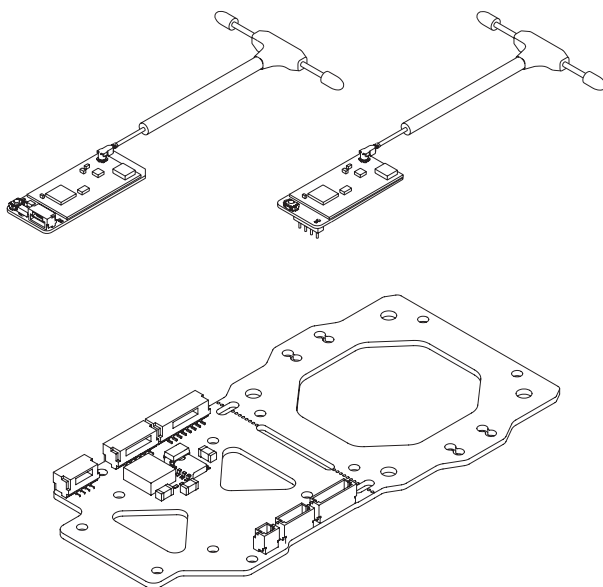


Headtracker Datalink System

User Manual



Using this Manual – Legend



Important



Tips



Explanation

Revision History

Date	Document Version
2024.05.30	V1.0

Date	Document Version
2025.01.17	V1.1

Date	Document Version
2025.05.21	V1.2

Caution

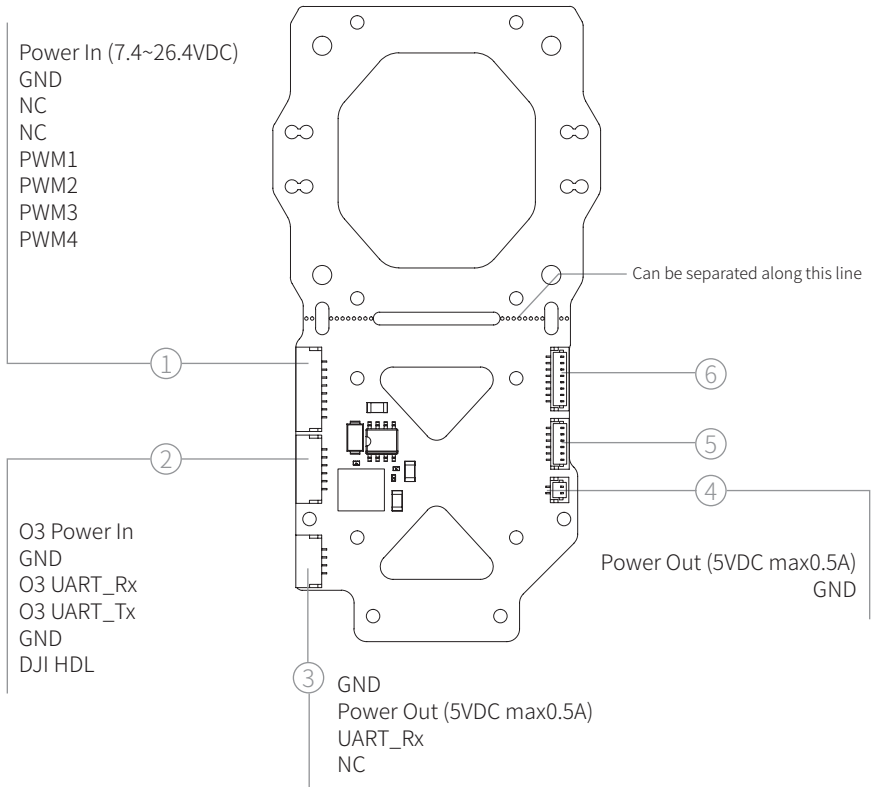
1. Make sure that the external power supply for the Integrated Base Plate is a lithium battery (2S~6S) with an input voltage between 7.4V~26.4V. Otherwise, the equipment may work abnormally or be damaged.
2. DO NOT short circuit any power output and GND on the Integrated Base Plate. Otherwise, the equipment may be damaged and may not work properly.
3. Follow the instructions in the user manual when installing the gimbal. Incorrect installation may cause the gimbal to not work properly.
4. Make sure that all connectors are secure and all parts are work properly.
5. DO NOT obstruct or twist the antennas. Otherwise, the transmission may be affected or blocked.
6. Make sure that there are no other transmitting devices in the surrounding area that may cause interference. DO NOT use the same frequency band as other devices. Otherwise, the transmission performance will be affected.
7. Make sure you fully understand and abide by local laws and regulations before using this product.

Catalog

Diagram	1
C-20 Integrated Base Plate	1
Datalink (Optional)	2
Accessories	3
Installation	4
Installing Gimbal and DJI O4 Pro	4
Installing Gimbal and DJI O4 (With Housing)	5
Installing Gimbal and DJI O4 (Without Housing)	8
Installation	9
Installing Gimbal and DJI O3	9
Installing Gimbal and Walksnail Moonlight	10
Installing Gimbal and Walksnail Avatar	12
Wiring Diagram	13
Installing Datalink Ground Unit	14
Antenna Transmission Zone	14
Linking	15
Appendix 1 Dimensions	16
Compliance Information	17
FCC Statement	17

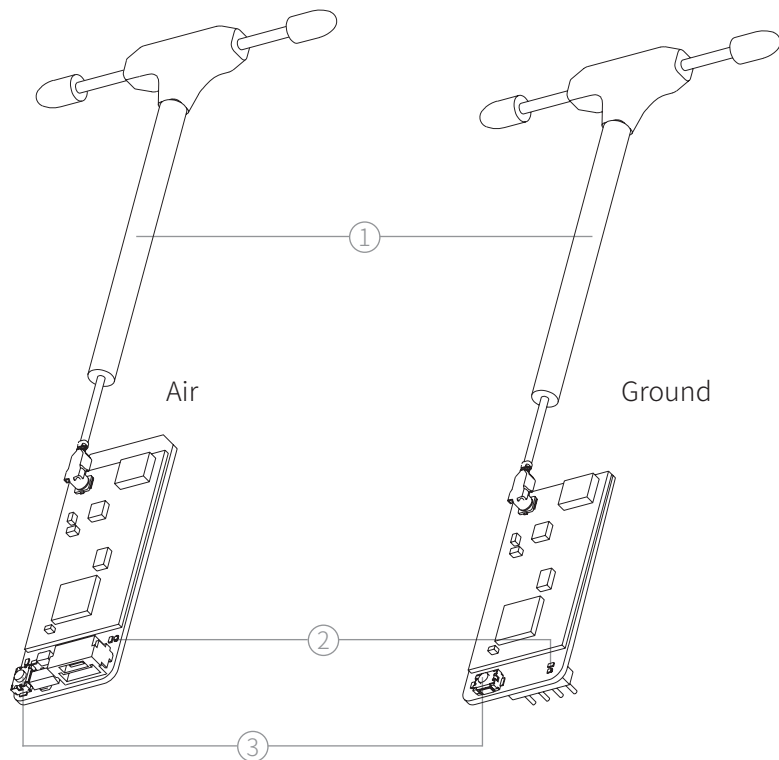
Diagram

C-20 Integrated Base Plate



1. Power-communication Port (SM08B-GHS-TB)
2. DJI 3-in-1 Port (SM06B-GHS-TB)
3. Datalink Port (SM04B-GHS-TB)
4. Power Out Port (BM02B-SRSS-TB)
5. DJI Transferring Port (BM06B-SRSS-TB)
6. Gimbal Transferring Port (BM08B-SRSS-TB)

Datalink (Optional)

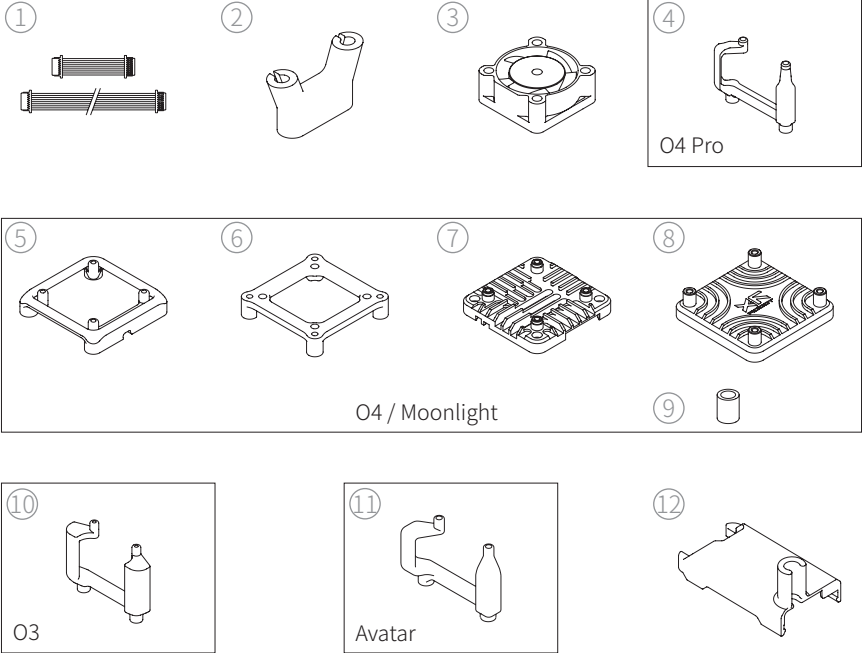


1. Datalink Antenna

2. Linking Statue Indicator

3. Linking Button

Accessories



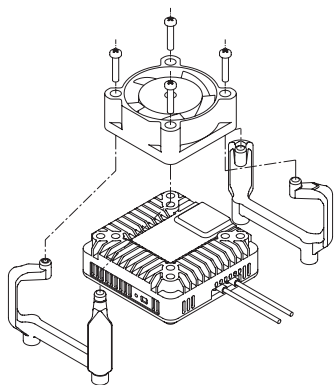
1. Gimbal Transferring Cable
3. Cooling Fan
5. Moonlight Fan Mount
7. O4 Air Unit Top Housing
9. Isolate Post
11. Avatar Air Unit Mount

2. Antenna Mount
4. O4 Air Unit Pro Mount
6. Moonlight Air Unit Mount
8. O4 Air Unit Bottom Housing
10. O3 Air Unit Mount
12. Datalink Ground Unit Cover

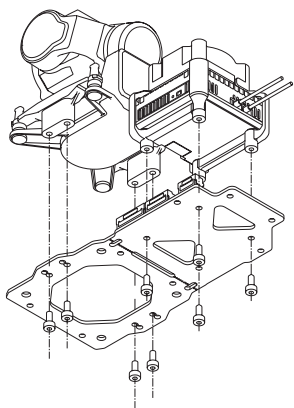
Installation

Installing Gimbal and DJI O4 Pro

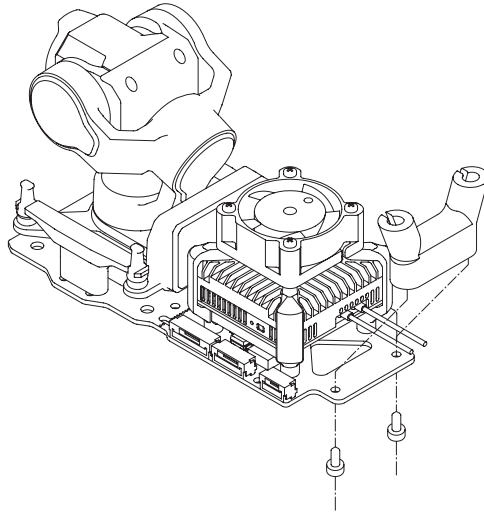
1. Install the camera on the gimbal, and connect the coaxial cable to the air unit. Refer to *C-20 User Manual*.
2. Fix the Cooling Fan and the air unit on the O4 Air Unit Pro Mount with four M1.7 x L10mm tapping screws.



3. Fix the gimbal on the Integrated Base Plate with four M2 x L4mm machine screws. Connect the power-communication port of the gimbal and the gimbal transferring port with a Gimbal Transferring Cable. Fix the air unit on the Integrated Base Plate with four M2 x L6mm tapping screws. Connect the air unit and the DJI transferring port of the Integrated Base Plate with a 3-in-1 cable in the O4 Pro package. Connect the Cooling Fan to the power out port of the Integrated Base Plate.

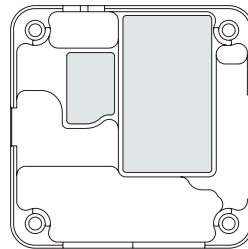
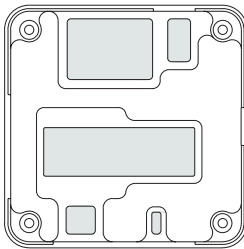


4. Fix the Antenna Mount on the Integrated Base Plate with two M2 x L6mm tapping screws, and snaps the antennas into the Antenna Mount.

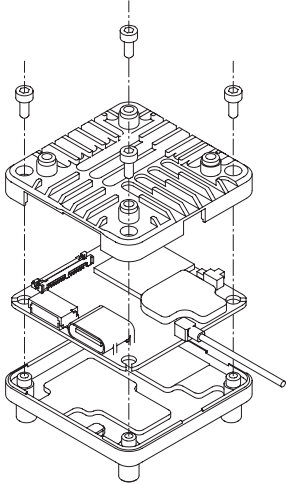


Installing Gimbal and DJI O4 (With Housing)

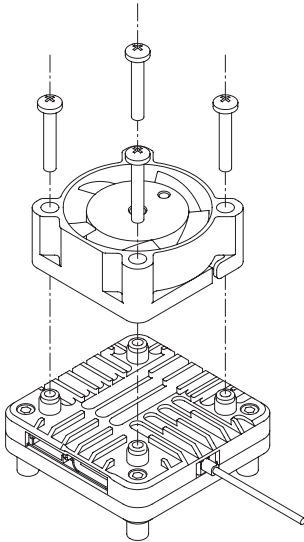
1. Install the camera on the gimbal, and connect the coaxial cable to the air unit. Refer to *C-20 User Manual*.
2. Smear thermal gel to the shaded area in the diagram.



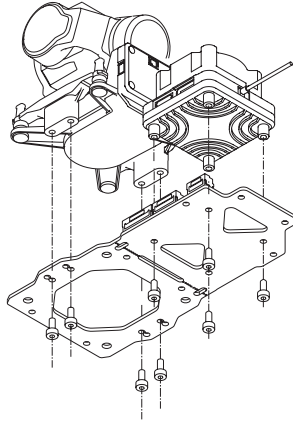
3. Install the housing with four M1.6 x L4mm machine screws.



4. Fix the Cooling Fan on the air unit with four M2 x L12mm machine screws.



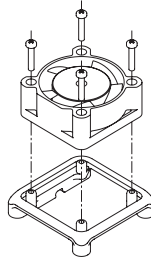
5. Fix the gimbal on the Integrated Base Plate with four M2 x L4mm machine screws. Connect the power-communication port of the gimbal and the gimbal transferring port with a Gimbal Transferring Cable. Fix the air unit on the Integrated Base Plate with four M2 x L4mm machine screws. Connect the air unit and the DJI transferring port of the Integrated Base Plate with a 3-in-1 cable in the O4 package. Connect the Cooling Fan to the power out port of the Integrated Base Plate.



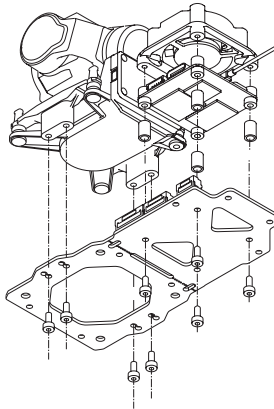
6. Fix the Antenna Mount on the Integrated Base Plate with two M2 x L6mm tapping screws, and snaps the antennas into the Antenna Mount. (Diagram refer to *Installing Gimbal and DJI O4 Pro – step 4* in this manual)

Installing Gimbal and DJI O4 (Without Housing)

1. Install the camera on the gimbal, and connect the coaxial cable to the air unit. Refer to *C-20 User Manual*.
2. Install the Cooling Fan on the Moonlight Fan Mount with four M1.7 x L10mm tapping screws.



3. Fix the gimbal on the Integrated Base Plate with four M2 x L4mm machine screws. Connect the power-communication port of the gimbal and the gimbal transferring port with a Gimbal Transferring Cable. Thread four M2 x L16mm tapping screws through the Integrated Base Plate, isolate posts and the rubber posts of the air unit, and screw into the fan mount. Connect the air unit and the DJI transferring port of the Integrated Base Plate with a 3-in-1 cable in the O4 package. Connect the Cooling Fan to the power out port of the Integrated Base Plate.

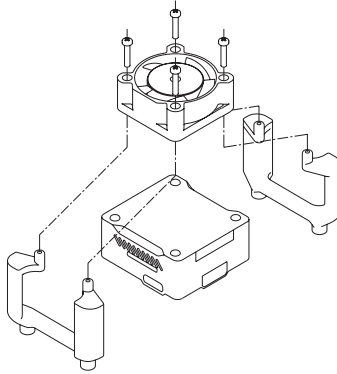


4. Fix the Antenna Mount on the Integrated Base Plate with two M2 x L6mm tapping screws, and snaps the antennas into the Antenna Mount. (Diagram refer to *Installing Gimbal and DJI O4 Pro – step 4* in this manual)

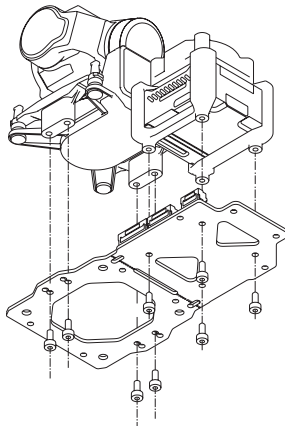
Installation

Installing Gimbal and DJI O3

1. Install the camera on the gimbal, and connect the coaxial cable to the air unit. Refer to *C-20 User Manual*.
2. Fix the Cooling Fan and the air unit on the O3 Air Unit Mount with four M1.7 x L10mm tapping screws.



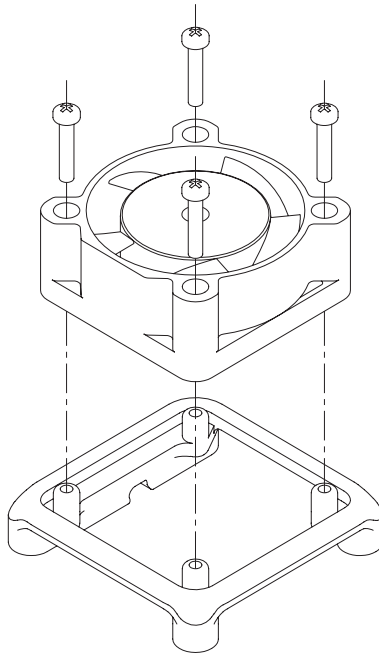
3. Fix the gimbal on the Integrated Base Plate with four M2 x L4mm machine screws. Connect the power-communication port of the gimbal and the gimbal transferring port with a Gimbal Transferring Cable. Fix the air unit on the Integrated Base Plate with four M2 x L6mm tapping screws. Connect the air unit and the DJI transferring port of the Integrated Base Plate with a 3-in-1 cable in the O3 package. Connect the Cooling Fan to the power out port of the Integrated Base Plate.



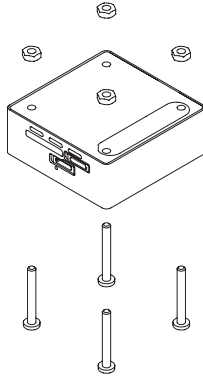
4. Fix the Antenna Mount on the Integrated Base Plate with two M2 x L6mm tapping screws, and snaps the antennas into the Antenna Mount. (Diagram refer to *Installing Gimbal and DJI O4 Pro – step 4* in this manual)

Installing Gimbal and Walksnail Moonlight

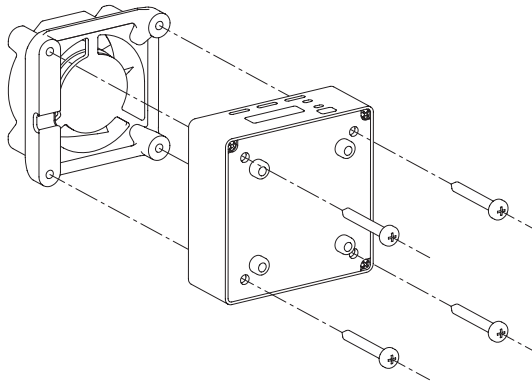
1. Install the camera on the gimbal, and connect the coaxial cable to the air unit. Refer to *C-20 User Manual*.
2. Install the Cooling Fan on the Moonlight Fan Mount with four M1.7 x L10mm tapping screws.



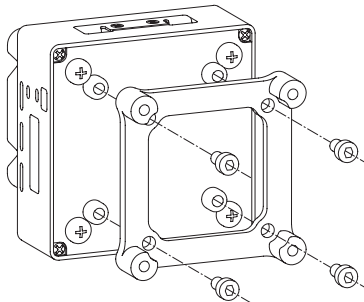
3. Remove four long screws and four nuts on the air unit.



4. Fix the Moonlight Fan Mount on the air unit with four M2 x L16mm tapping screws.



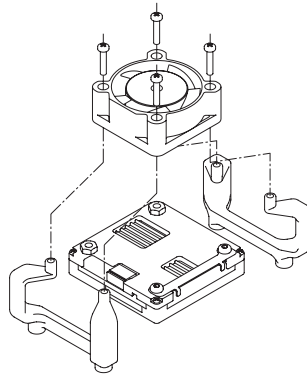
5. Fix the Moonlight Air Unit Mount on the air unit with four M2 x L4mm machine screws.



6. Fix the gimbal on the Integrated Base Plate with four M2 x L4mm machine screws. Connect the power-communication port of the gimbal and the gimbal transferring port with a Gimbal Transferring Cable. Fix the air unit on the Integrated Base Plate with four M2 x L6mm tapping screws. Connect the Cooling Fan to the power out port of the Integrated Base Plate. (Diagram refer to *Installing Gimbal and DJI O4 Pro – step 3* in this manual)
7. Fix the Antenna Mount on the Integrated Base Plate with two M2 x L6mm tapping screws, and snaps the antennas into the Antenna Mount. (Diagram refer to *Installing Gimbal and DJI O4 Pro – step 4* in this manual)

Installing Gimbal and Walksnail Avatar

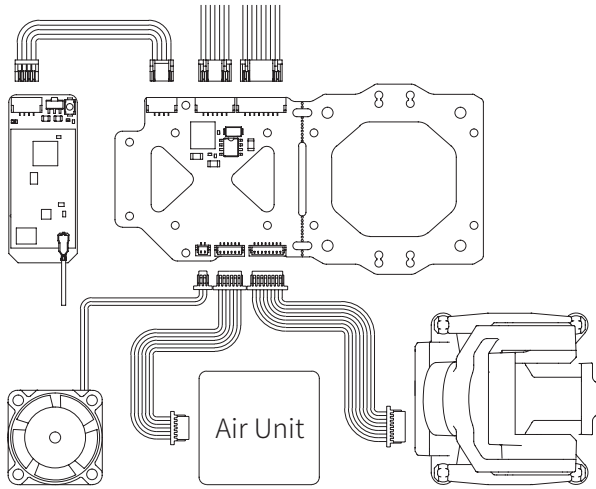
1. Install the camera on the gimbal, and connect the coaxial cable to the air unit. Refer to *C-20 User Manual*.
2. Fix the Cooling Fan and the air unit on the O3 Air Unit Mount with four M1.7 x L10mm tapping screws.



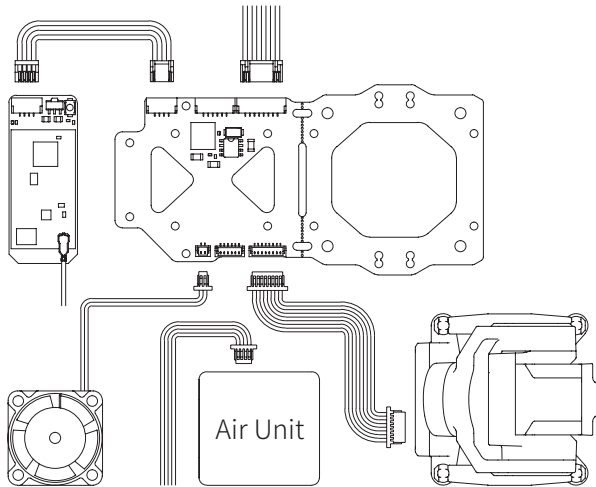
3. Fix the gimbal on the Integrated Base Plate with four M2 x L4mm machine screws. Connect the power-communication port of the gimbal and the gimbal transferring port with a Gimbal Transferring Cable. Fix the air unit on the Integrated Base Plate with four M2 x L6mm tapping screws. Connect the Cooling Fan to the power out port of the Integrated Base Plate. (Diagram refer to *Installing Gimbal and DJI O4 Pro – step 3* in this manual)
4. Fix the Antenna Mount on the Integrated Base Plate with two M2 x L6mm tapping screws, and snaps the antennas into the Antenna Mount. (Diagram refer to *Installing Gimbal and DJI O3 – step 4* in this manual)

Wiring Diagram

DJI O4 Pro / DJI O4 / DJI O3 / DJI Digital FPV System / Vista Kit



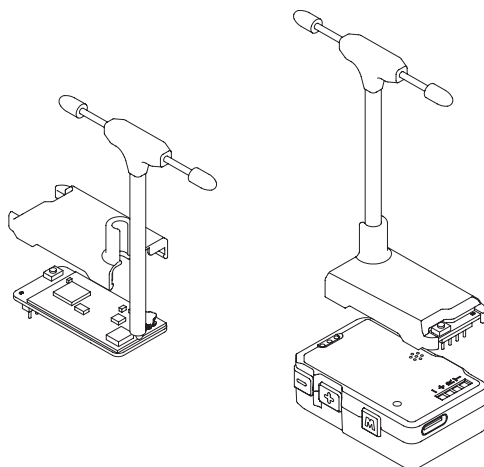
Walksnail Moonlight Kit / Walksnail Avatar Kit



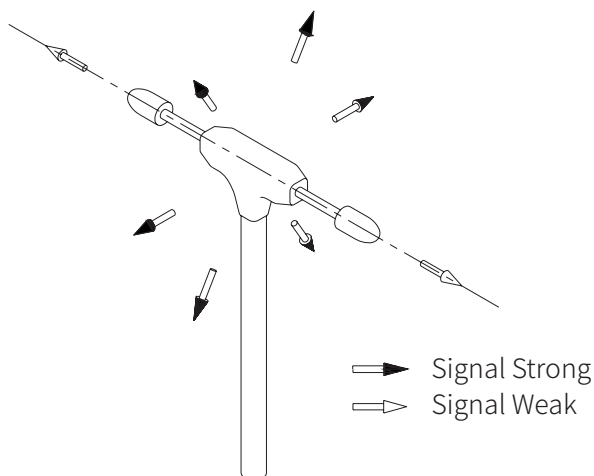
Installing Datalink Ground Unit

Install the cover on the Datalink. Insert the pin header of the datalink module into the expansion port of the Headtracker.

 Make sure the Datalink is installed on the Headtracker following the direction shown as below. Otherwise, the equipment may be damaged and may not work properly.



Antenna Transmission Zone



Linking

Press and hold the linking buttons of the air unit and ground unit of the Datalink until both linking status indicators are quickly blinking, which means the datalink system is in linking status. Linking status indicators being solid on indicates linking success.

Linking status indicators slowly blinking indicates datalink system is disconnected.

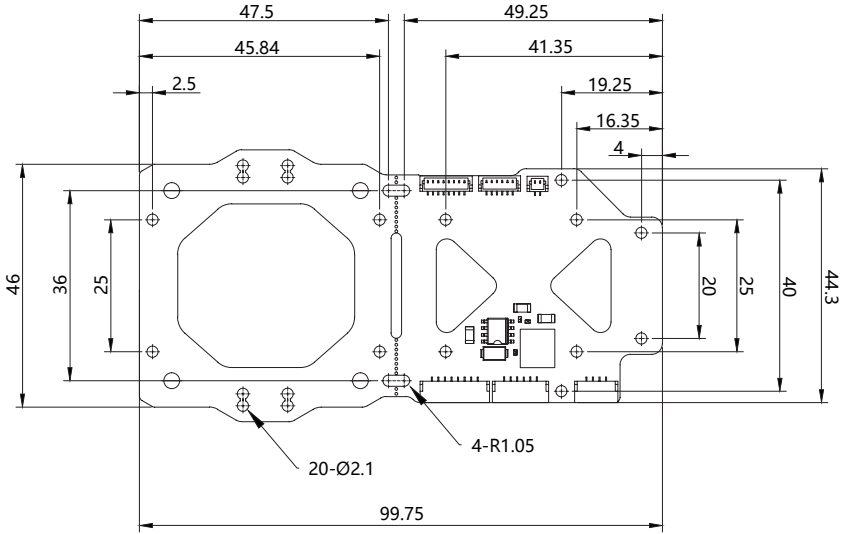


Make sure there is no other transmitting devices in the same frequency band is working around in the surrounding area.



Please re-link the datalink system if the gimbal is not able to move smoothly following the Headtracker after linking.

Appendix 1 Dimensions



Unit: mm

Compliance Information

FCC Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This modular complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This modular must be installed and operated with a minimum distance of 20 cm between the radiator and user body.